The VacScene

Public Health – Seattle & King County **Immunization Newsletter** Volume 11, Number 1 January/February 2005

What's Inside?

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Public Health - Seattle & King County
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The VacScene is a publication of Public Health – Seattle & King County written for health professionals. Content is consistent with the most current recommendations from the Centers for Disease Control and Prevention (CDC) and the Advisory Committee on Immunization Practices (ACIP).

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Missed Opportunities for Adult Immunization

Adult immunization rates for pnemococcus, tetanus, and influenza are low in the United States. A recent study (Nowalk, Zimmerman and Feghali, 2004) examined the possible reasons behind low rates in adults aged 66 years and older. The study reviewed 810 medical records in various settings including rural, inner-city and suburban practices. The patients represented a wide geographic and socioeconomic spectrum.

A significant proportion of eligible patients were not vaccinated during office visits, missing the opportunity to protect susceptible people. Missed opportunities to vaccinate against influenza occurred at 38 percent of visits, against pneumococcal disease at 47 percent of visits, and against tetanus at nearly all visits (95 percent). During the study period which covered three influenza seasons, only 24 percent received the influenza vaccination every year, and 25 percent were not vaccinated against influenza at all.

Patient refusal occurred at a rate of nine percent or less. Significant reasons for not vaccinating included failure of the health care professional to discuss vaccinations with their patients, and not vaccinating patients at acute care visits. Low frequency of preventive service visits also contributed to missed opportunities to vaccinate.

Travel Vaccinations

Referring patients to a travel clinic will help them prepare for potential health risks they may encounter during travel. Public Health – Seattle & King County Travel Clinics (located in Seattle, Auburn and Bothell), and other clinics offer travel services exclusively or as part of general immunization services.

Patients should have a physical exam performed by their regular health care provider, prior to their referral to a travel clinic, to detect or monitor any long-term or acute health problems. Then the travel clinic will assess the risks specific to individual travel plans. A travel assessment includes:

Review of the travel itinerary - Some countries require proof of vaccination when entering from certain countries because of diseases that may be occurring in those areas. Travel to certain areas may mean more potential exposure to insects, food and water-borne illness, and other infectious diseases. Allow at least a month before travel will begin, to allow time to receive vaccinations that may require more than one dose.

Assessment of risk factors for specific illnesses and injuries - The travel clinic provider will review the type of accommodations in which the traveler will stay (e.g., 4-star hotel vs. camping), and where they will get their meals and drinking water (e.g., hotel dining room vs. street vendor). Travel activities are also considered—do they involve high altitude, swimming in areas with water-borne bacteria or parasites, or possible exposure to bites of domestic or wild animals?

Review of Medical History and Plans for Medical and Emergency Care - Travelers with medical conditions that require medication or possibly emergency care while traveling can learn from a travel clinic staff about how to access medication or care they may need in various locations.

Vaccine Requirements and Recommendations - Travel clinic staff will help travelers determine whether they need to update routine immunizations (e.g., Td, MMR) and which travel-specific vaccines or medications (e.g. anti-malarial medication) they may need for their trip. The clinic will set up a vaccination schedule to help the traveler complete vaccines in a timely way, hopefully before travel begins. For referral to a Public Health Travel Clinic, call 206-296-4949, or access the website at: www.metrokc.gov/health/immunization/travelclinics.htm. For travel information from the CDC visit: www.cdc.gov/travel/.

VFC News
Vaccines for Children Program

2005 Vaccine Shipping Calendar
Most vaccines are shipped from our distributor every Monday, Tuesday and Wednesday (excluding holidays). An order received in the Public Health VFC office on a Wednesday afternoon will not be shipped until the following Monday at the earliest. Try to allow eight (8) business days for regular vaccine orders at all times.

Varicella vaccine is ordered Wednesday mornings only; allow a minimum of two weeks for delivery. A varicella vaccine request received on a Wednesday afternoon cannot be processed until the following Wednesday, or a minimum of three weeks from order date to delivery date.

Mark Your Calendar Now!
Deadlines for 2005 Vaccine Orders

Vaccine	Last Day to Order
Varicella	Tuesday, December 6, 2005
All other vaccines in 2005	Tuesday, December 13, 2005

Regular shipping schedule will resume Tuesday, January 3, 2006.

New Vaccine Storage Tips
The California Distance Learning Health Network (CDLHN) recently hosted a teleconference on vaccine storage and handling. The presentation is available on VHS for $30 at www.cdlhn.com. Participants shared some helpful new suggestions for protecting your vaccine supply:

- Be sure the refrigerator is level. If placed on an uneven surface, the refrigerator will often not close properly.
- Be cautious if considering a stand-alone freezer; make sure it has a thermostat and therefore can be adjusted to increase or decrease the temperature.
- Vacuum the coils on the back of the refrigerator *every three months*. Dust accumulation can affect the unit's efficiency and can even be a fire hazard.
- Keep the gaskets clean (rubber strips lining each door); replace them if they become cracked or torn to prevent cold air leakage.
- Plug in a standard clock (with second- and minute-hands) using the same outlet as the refrigerator. If there is a power outage overnight, the clock will stop and start when the refrigerator does and you will know how long the power was off.

VacScene Newsletter Mailing List
The VacScene mailing list has recently been updated to assure it is being sent to the right people. Please contact the Public Health Immunization Program to make corrections or additions. Call (206) 296-4774, or send information to: susan.tower@metrokc.gov.

Effective January 1: Medicare to Increase Payment for Adult Vaccinations
The Centers for Medicare & Medicaid Services (CMS) issued their final rule for physician payment for 2005 with new benefits and higher payments for preventive services. Increased payments result from the Medicare Modernization Act of 2003 (MMA) and are included in the 2005 Physician Fee Schedule rule, which became effective January 1, 2005.

The final rule dramatically increases payments for vaccinations and other types of injections. For example, payments for administering the influenza vaccine will rise from $8 to $18. Physicians can also be paid for injections and vaccinations when performed on the same day as other Medicare covered services. Medicare previously did not allow payment for injections provided on the same day as other Medicare services.

Because new permanent codes will not be included in the CPT until 2006, CMS has developed temporary codes to allow physicians to be paid for these services beginning January 1, 2005. For more information go to: www.cms.hhs.gov/media/press/release.asp?Counter=1248.

Vaccinate with Hib After 24 Months of Age?
Before the introduction of the vaccine, *Haemophilus influenzae type b* (Hib) was the leading cause of bacterial meningitis (1 in 200) among children under five years of age in the United States. Even children who have had Hib invasive disease benefit from the vaccine because natural infection does not always result in development of protective antibody levels. Children who developed Hib disease at less than 24 months of age should receive the vaccine.

The vaccine is recommended for infants and children through two through 59 months. Hib disease occurs primarily in children under five years of age with a peak incidence between six months and one year of age. Children who attend group child care are at increased risk of invasive Hib disease.

Mumps Incidence in UK = Need for Diligence Here
Mumps is rare in the U.S. today, thanks to routine MMR vaccination. However, in the **United Kingdom**, there has been a **336 percent rise in the number of mumps infections reported this year**. In Northeast Scotland, cases have risen 2,500 percent. Many people aged 15 through 24 years in the U.K. are at a greater risk of contracting mumps because they have not been vaccinated. According to the Health Protection Agency of the U.K., 2,000 cases of mumps were reported in the first half of 2004 compared to 1,500 for all of last year (most affected were people in their late teens and early 20s who had not been vaccinated).

When Mumps Isn't Mumps

Diagnosing mumps based on symptoms alone can cause an unwarranted and costly cascade of events. Clinically, mumps is described as an acute onset of tender unilateral or bilateral self-limited swelling of the parotid or other salivary glands lasting two or more days without other apparent cause. However, **laboratory confirmation is necessary** to ensure that only true mumps cases are reported.

Other relatively common conditions can be similar to mumps, including: bacterial parotitis (e.g. streptococcal and staphylococcal infections), salivary gland tumors, drug or chemical toxin-related parotitis, obstruction caused by calculus blockage of the parotid duct, enlarged mandibular lymph nodes, and parotitis due to other viral infections (e.g. adenovirus, enterovirus).

Mumps Rare in U.S. Since Advent of Vaccine

Following vaccine licensure in 1968 the incidence of mumps has declined significantly. King County has had one or fewer mumps cases annually since 2001. Most cases of parotid swelling reported as mumps based on clinical symptoms, and in the absence of specific risk factors for mumps, are ruled out by serologic testing.

Persons who have had one dose of mumps vaccine are considered immune because mumps vaccine is estimated to be 95 percent effective. The duration of immunity is believed to be greater than 25 years, and is probably lifelong in most people.

The Hidden Cost of a "Mumps" Diagnoses

People with mumps are considered contagious and should remain isolated from susceptible persons until nine days after the onset of swelling. This often means parents must make alternative arrangements for children who are excluded from school and/or day care. This may result in unnecessary costs in cases where the diagnosis could have been ruled out with prompt serological testing.

When Should Mumps Be Suspected?

International travel increases the risk for exposure to mumps. Mumps remains a common disease in many parts of the world because only 38 percent of countries require mumps vaccination as part of their routine childhood immunization schedule.

The screening tool below may help with diagnosing mumps accurately:

Screening Elements	High Suspicion	Low Suspicion
International travel (12 – 25 days before onset) or close contact with recent international traveler	√	
Contact with symptomatic person (Parotitis) 12-25 days before onset	√	
Recent dental problems		√
Trauma to face or jaw		√
One dose of mumps vaccine		√

It is important to order serological tests for mumps within the right time frame. A positive serological test for mumps IgM antibody 5 or more days after onset of parotitis is diagnostic, however, a negative IgM test obtained on or before day 5 after parotitis onset is inconclusive, and should be repeated. A positive mumps IgG antibody test, and a negative IgM in a patient with a history of mumps vaccination is consistent with immunity to mumps infection. Seroconversion from negative to positive mumps antibodies, or a four-fold rise in IgG titer are also diagnostic of mumps. Mumps virus can also be cultured from throat swabs, urine and CSF. Examples of recommended mumps testing strategies for specific clinical situations:

Patient Scenario	Recommended Tests	Interpretation

Parotitis of 5 or more days duration in patient *with* documentation of mumps vaccination	Order mumps IgG and IgM	• IgG negative; no preexisting immunity
		  o IgM (+) at > 5 days confirms mumps
		  o IgM (-) at > 5 days rules out mumps
		• IgG (+) and IgM (-): preexisting immunity and not acute mumps
		• IgG (+) and IgM (+): persistence of IgM antibody post-vaccination or acute mumps – consult Public Health

Parotitis of 5 or more days duration in patient *without* documentation of mumps vaccination	Order mumps IgG and IgM	• IgM (+) at > 5 days confirms mumps • IgM (-) at > 5 days rules out mumps • IgG positive or negative depending on interval since onset of symptoms and true vaccination history

Parotitis of less than 5 days duration in patient with documentation of mumps vaccination	Order mumps IgG now and order IgM (and repeat IgG if initial was negative) 5 or more days after onset of parotitis	• Early IgG positive suggests patient immune to mumps
		• Early IgG negative suggests no preexisting immunity
		  o IgM (+) at > 5 days confirms mumps
		  o IgM (-) at > 5 days rules out mumps
		• ***IgM (-) at < 5 days is inconclusive and does not rule out mumps***

Parotitis of less than 5 days duration in patient with unknown vaccination status or not immunized for mumps	Order IgG now and order IgM (and repeat IgG if initial was negative) 5 or more days after onset of parotitis	• If IgG (-), increased suspicion of mumps
		  o IgM (+) at > 5 days confirms mumps
		  o IgM (-) at > 5 days rules out mumps
		• ***IgM (-) at < 5 days is inconclusive and does not rule out mumps***
		• Seroconversion and/or 4-fold rise in IgG titer are diagnostic of mumps

If you would like more information about or assistance with mumps diagnosis, call Public Health at 206-296-4774.

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Highlights

The Top Ten Unfounded Health Scares of 2004

"Pediatric vaccines and Autism" made the American Council on Science and Health's (ACSH) *Top Ten Unfounded Health Scares* list. Also listed as an unsubstantiated concern was "Mercury in Seafood Causes Neurological Problems in Humans." The ACSH evaluated 27 of the greatest health scares of modern times, reviewed the basis of each, and presents scientifically accurate information on each topic. To view the online publication visit: www.acsh.org/healthissues/newsID.1007/healthissue_detail.asp.

What Does Pertussis Sound Like?

To hear a classic whooping cough visit www.pertussis.com.

39th National Immunization Conference

The 39th National Immunization Conference is scheduled in Washington, DC, March 21-24, 2005 at the Washington Hilton and Towers. The goals of the conference are to help participants provide comprehensive immunization coverage for all age groups and explore innovative strategies for developing programs, policy, and research to promote immunization coverage for all age groups. For more information about the conference visit: www.cdc.gov/nip/nic.

2005 Epidemiology and Vaccine Preventable Disease CDC Four-Part Series Satellite Course

Mark your calendars for CDC's live four-part satellite course, ***Epidemiology and Prevention of Vaccine-Preventable Diseases***, scheduled for **February 17, 24, March 3 and 10, 2005**. The course is co-sponsored by the Region X Public Health Service, and will be held in Seattle at the Blanchard Plaza Building (6th and Blanchard). Each interactive broadcast will run from **9:00 a.m. - 12:30 p.m.**

The primary focus of the sessions will be to provide the most current information available on vaccine-preventable diseases, vaccine management and safety, and recommended immunization practices. Health care professionals who either give immunizations or set policy for their offices or clinics are encouraged to attend. CME/CEUs will be awarded to course participants who complete the training. For more information, call (206) 296-5252. To print a registration form visit: www.metrokc.gov/health/immunization/providers.htm.

New 2005 Immunization Schedule

To print a copy of the latest childhood and adolescent immunization schedule visit: www.cdc.gov/nip/menus/vaccines.htm#Schedules.

Available in alternate formats